

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: **Joseph A. & Linda R. Wickens
416 Lower Deep Creek Rd.
Townsend MT 59644-9738**
2. Type of action: **Application to Change a Water Right No. 30027747-411
(Statements of Claim Nos. 3834, 3839, 3840-411)**
3. Water source name: **Deep Creek**
4. Location affected by action: **SENESE, Sec 3, Twp 6N, Rge 2E, Broadwater Co.**
5. Narrative summary of the proposed project, purpose, action to be taken, and objectives:
The applicant proposes to add a point of diversion and change a portion of the place of use on three historic water rights. The water rights were once used for irrigation on a large ranch. The ranch has been split and the water rights apportioned to the individuals buying the property. The only portion of the water rights being changed are the portions owned by Joseph & Linda Wickens.

The applicant submitted this application to add a point of diversion to the existing water rights. The additional point of diversion will be located on the applicants property in the SENESE of Sec 3, Twp 6N, Rge 2E, Broadwater County. The applicant also applied to add 5.3 acres of new irrigation in the SE of Sec 3, Twp 6N, Rge 2E, Broadwater County. The applicant sold a parcel of irrigated land to a neighbor. The applicant retained a portion of the water right sufficient to supply irrigation water to the new place of use.

The maximum flow rate and volume for this change would be 302 gpm up to 65.8 acre-feet per year on a total of 25.3 acres.

The DNRC shall issue an Authorization to Change if the criteria in 85-2-402, MCA are met.

Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

**Montana Natural Heritage Program (MTNHP)
Montana Fisheries Information System (MFISH)
Montana Department of Environmental Quality (TMDL listing 2006 303(d) list)
Montana Department of Natural Resources (DNRC) – Eric Chase, Hydrologist**

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: **No significant impact.**

The Montana Fisheries Information System shows a chronic dewatering problem from mile 0.0 to river mile 6.0. Chronic dewatering is a significant problem in virtually all years. The proposed change would not create an additional burden on the source of supply because no additional water will be diverted.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: **No significant impact.**

Deep Creek is on the TMDL water quality impaired list. The proposed project would not have an adverse affect on water quality because no additional water will be diverted.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: **No significant impact to groundwater quality or supply.**

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: **The diversion is an electrically driven centrifugal pump. The pump suction will be placed in a natural hole in Deep Creek which will provide the pump suction adequate cover to avoid a whirlpool affect. This site can be used with almost no disturbance to the stream bed or bank. The pump and motor (20 hp) supply water to mainlines and are able to convey water to the lateral via a system that divides the flow from the pump in two directions. That will allow the applicant the ability to supply water to laterals on fields on either side of Deep Creek.**

The proposed project will not impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams or well construction.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: **No significant impact.**

The MTNHP has identified one species of special concern in the vicinity of the project area. The species is a vertebrate animal, the Spizella breweri or Brewer's Sparrow. None of the occurrences were in the immediate area of the project. The Brewer's Sparrow is at home nesting in sagebrush plants. This area is irrigated and has been for many years and would not be a good place for sagebrush to grow. There should not be an impact to the sparrow.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: **This project does not involve a wetland.**

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: **This project does not involve pond development.**

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: **No significant impact.**

There are three types of soils in the proposed project. Chinook-Crago loamy sands make up the majority with small amounts of Mussel-Crago complex and Musselshell-Crago channery loams. Most of the irrigated land is within ¼ mile from Deep Creek. According to information in the file, whether it is surface wastewater or subsurface return flow, substantially all of the water returns to the creek within several months. Some of the return flows would probably be more immediate.

This project should have no affect on soil quality, alteration of soil stability, or moisture content. Saline seep should not be a concern.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: **No significant impact.**

The project should not have an impact to vegetative cover. The new point of diversion involves the installation of a new pump, however, it should have a minimal effect to the vegetative cover. The new place of use will be planted to alfalfa. This should not allow any noxious weeds to take control. The landowner is responsible for controlling any noxious weeds on the property.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: **No significant impact.**

The pump that will be used is electric. There should not be a deterioration of air quality or adverse effects of vegetation due to increased air pollutants.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: **No significant impact.**

The proposed project involves land that has been previously disturbed.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: **No significant impact.**

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: **No significant impact.**

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: **No significant impact. This proposed project will not impact access to or the quality of recreation and wilderness activities.**

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: **No significant impact.**

This proposed project will not impact human health.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes ___ No X

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

(a) Cultural uniqueness and diversity? **No significant impact.**

(b) Local and state tax base and tax revenues? **No significant impact.**

- (c) Existing land uses? **No significant impact. The land use is not changing**
 - (d) Quantity and distribution of employment? **No significant impact.**
 - (e) Distribution and density of population and housing? **No significant impact.**
 - (f) Demands for government services? **No significant impact.**
 - (g) Industrial and commercial activity? **No significant impact.**
 - (h) Utilities? **No significant impact.**
 - (i) Transportation? **No significant impact.**
 - (j) Safety? **No significant impact.**
 - (k) Other appropriate social and economic circumstances? **No significant impact.**
2. Secondary and cumulative impacts on the physical environment and human population:
- Secondary Impacts: **There have been no secondary impacts on the physical environment and human population identified at this time.**
- Cumulative Impacts: **There have been no cumulative impacts on the physical environment and human population identified at this time.**
3. Describe any mitigation/stipulation measures: **No mitigation or stipulation measures have been identified or discussed at this time.**
4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:
There do not appear to be any reasonable alternatives to the proposed action. The no action alternative would have the applicant use the water as it has been used historically.

PART III. Conclusion

- 1. Preferred Alternative: **Issue the authorization for the proposed project as applied for or in some alternative form deemed reasonable.**
- 2. Comments and Responses: **No comments have been received at this time.**
- 3. Finding:
Yes ___ No **X** Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **An environmental assessment is the appropriate level of analysis for the proposed action because no significant environmental impacts were identified.**

Name of person(s) responsible for preparation of EA:

Name: Kathy Arndt

Title: Water Resources Specialist

Date: September 26, 2007